

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

Search: The ACM Digital Library The Guide

secure processor



USPTO

Searching within **The ACM Digital Library** for: secure processor ([start a new search](#))

Found 3,271 of 277,885

REFINE YOUR SEARCH

▼ Refine by Keywords

secure processor



Discovered Terms

▼ Refine by People

Names

Institutions

Authors

Editors

Reviewers

▼ Refine by Publications

Publication Year

Publication Names

ACM Publications

All Publications

Content Formats

Publishers

▼ Refine by Conferences

Sponsors

Events

Proceeding Series

ADVANCED SEARCH[Advanced Search](#)**FEEDBACK**[Please provide us with feedback](#)

Found 3,271 of 277,885

Search Results

Results 1 - 20 of 3,271

Sort by relevance

Save results to a Binder

Result page: [1](#) [2](#) [3](#)**1 Making secure processors OS- and performance-friendly**

Siddhartha Chhabra, Brian Rogers, Yan Solihin, Milos Prvulovic

March 2009 **Transactions on Architecture and Code Optimization (TA****Publisher:** ACM [Request Permissions](#)

Full text available: Pdf (1.04 MB)

Additional Information: [full citation](#), [abstract](#)**Bibliometrics:** Downloads (6 Weeks): 13, Downloads (12 Months): 216, Downl

In today's digital world, computer security issues have become increasing researchers have proposed designs for secure processors that utilize ha and integrity verification to protect the privacy ...

Keywords: Secure processor architectures, memory encryption, memo

2 Design and Implementation of the AEGIS Single-Chip Secure Proce

Functions

G. Edward Suh, Charles W. O'Donnell, Ishan Sachdev, Sriniwas Devadas June 2005 **ISCA '05: Proceedings of the 32nd annual international symposiu****Publisher:** ACM

Full text available: Pdf (288.96 KB)

Additional Information: [full citation](#), [abstract](#)**Bibliometrics:** Downloads (6 Weeks): 9, Downloads (12 Months): 106, Downlo

Secure processors enable new applications by ensuring private and auth face of physical attack. In this paper we present the AEGIS secure proce RTL implementation on FPGAs. By using ...

Also published in:

May 2005 **SIGARCH Computer Architecture News** Volume 33 Issue 2**3 Authentication Control Point and Its Implications For Secure Process**

Weidong Shi, Hsien-Hsin S. Lee

December 2006 **MICRO 39: Proceedings of the 39th Annual IEEE/ACM Internatio**

Microarchitecture

Publisher: IEEE Computer Society

Full text available: Pdf (619.30 KB)

Additional Information: [full citation](#), [abstract](#)**Bibliometrics:** Downloads (6 Weeks): 2, Downloads (12 Months): 46, Downlo

Secure processor architecture enables tamper-proof protec tion on soft

security problems such as reverse-engineering prevention, trusted computing ... providing a secure computing environment ...

4 Processor virtualization for secure mobile terminals

Hiroaki Inoue, Junji Sakai, Masato Edahiro

July 2008 **Transactions on Design Automation of Electronic System**

Publisher: ACM Request Permissions

Full text available: Pdf (1.53 MB)

Additional Information: [full citation](#), [abstract](#)

Bibliometrics: Downloads (6 Weeks): 24, Downloads (12 Months): 234, Downloa

We propose a processor virtualization architecture, VIRTUS, to provide applications and virtualized domains for downloaded native applications generation mobile terminals can provide ...

Keywords: Multiprocessor, processor virtualization

5 Efficient Memory Integrity Verification and Encryption for Secure Pro

G. Edward Suh, Dwaine Clarke, Blaise Gassend, Marten van Dijk, Sriniwas J

December 2003 **MICRO '36: Proceedings of the 36th annual IEEE/ACM Inte**

Microarchitecture

Publisher: IEEE Computer Society

Full text available: Pdf (307.01 KB)

Additional Information: [full citation](#), [abstract](#)

Bibliometrics: Downloads (6 Weeks): 8, Downloads (12 Months): 79, Downloa

Secure processors enable new sets of applications such as commercial g protection, and secure mobile agents by providing security from both physical paper proposes new hardware mechanisms for memory ...

6 Using Address Independent Seed Encryption and Bonsai Merkle Tre

OS- and Performance-Friendly

Brian Rogers, Siddhartha Chhabra, Milos Prvulovic, Yan Solihin

December 2007 **MICRO '07: Proceedings of the 40th Annual IEEE/ACM Inte**

Microarchitecture

Publisher: IEEE Computer Society

Full text available: Pdf (954.09 KB)

Additional Information: [full citation](#), [abstract](#)

Bibliometrics: Downloads (6 Weeks): 10, Downloads (12 Months): 50, Downloa

In today's digital world, computer security issues have become increasing researchers have proposed designs for secure processors which utilize t and integrity verification to protect the privacy ...

7 Fast Secure Processor for Inhibiting Software Piracy and Tampering

Jun Yang, Youtao Zhang, Lan Gao

December 2003 **MICRO '36: Proceedings of the 36th annual IEEE/ACM Inte**

Microarchitecture

Publisher: IEEE Computer Society

Full text available: Pdf (258.88 KB)

Additional Information: [full citation](#), [abstract](#)

Bibliometrics: Downloads (6 Weeks): 7, Downloads (12 Months): 89, Downloa

Due to the widespread software piracy and virus attacks, significant effort has been made to protect computer systems. For stand-alone computers, a key observation is that any component is vulnerable to security attacks. ...

- 8 Design of secure cryptography against the threat of power-attacks in

Catherine H. Gobetos

February 2004 **Transactions on Embedded Computing Systems (TECS)**

Publisher: ACM Request Permissions

Full text available: Pdf (214.56 KB)

Additional Information: full citation, abstract

Bibliometrics: Downloads (6 Weeks): 8, Downloads (12 Months): 79, Download

Embedded wireless devices require secure high-performance cryptography with low energy dissipation. This paper presents for the first time a design methodology for a complex DSP-embedded processor core. Elliptic ...

Keywords: VLIW

- 9 A novel secure wireless video surveillance system based on Intel IXP4200

Hao Yin, Chuang Lin, Bertrand Sébastien, Xiaowen Chu

October 2005 **WMuNeP '05: Proceedings of the 1st ACM workshop on Wireless network performance modeling**

Publisher: ACM Request Permissions

Full text available: Pdf (399.19 KB)

Additional Information: full citation, abstract

Bibliometrics: Downloads (6 Weeks): 9, Downloads (12 Months): 51, Download

This paper presents the design of a novel high-secure wireless video surveillance system based on the 802.11g ad-hoc wireless infrastructure; and the Intel IXP4200 as the basic processing unit. A media-dependant ...

Keywords: ad-hoc network security, network processor, video selective delivery

- 10 Fault-secure algorithms for multiple-processor systems

Prithviraj Banerjee, Jacob A. Abraham

January 1984 **ISCA '84: Proceedings of the 11th annual international symposium on Computer architecture**

Publisher: ACM

Full text available: Pdf (844.91 KB)

Additional Information: full citation, abstract

Bibliometrics: Downloads (6 Weeks): 1, Downloads (12 Months): 35, Download

In this paper we describe techniques for achieving fault secureness with respect to faults in the system. In order to do this we consider the relationships between algorithms and their fault-secure counterparts.

Also published in:

June 1984 **SIGARCH Computer Architecture News** Volume 12 Issue 3

- 11 Accelerating memory decryption and authentication with frequent value tables

Weidong Shi, Hsien-Hsin S. Lee

May 2007 **CF '07: Proceedings of the 4th international conference on Cryptographic techniques and financial criminology**

Publisher: ACM Request Permissions

Full text available:

Additional Information: full citation, abstract

 Pdf (336.57 KB)**Bibliometrics:** Downloads (6 Weeks): 4, Downloads (12 Months): 40, Download

This paper presents a novel architectural technique to hide fetch latency and authenticated memory. A number of recent secure processor design, encryption and authentication to protect un-trusted ...

Keywords: message authentication, secure processors, value predictio**12** [HIDE: an infrastructure for efficiently protecting information leakage](#) ( Xiaotong Zhuang, Tao Zhang, Santosh Pandey December 2004 **ASPLOS-XI: Proceedings of the 11th international conference on programming languages and operating systems****Publisher:** ACM Full text available:  Pdf (216.31 KB)Additional Information: [full citation](#), [abstract](#)**Bibliometrics:** Downloads (6 Weeks): 6, Downloads (12 Months): 72, Download

XOM-based secure processor has recently been introduced as a mechanism resistant execution. XOM provides support for encryption/decryption and XOM nor any other current approach adequately ...

Keywords: address bus leakage protection, secure processor

Also published in:

November 2004 **SIGPLAN Notices**

Volume 39 Issue 11

December 2004 **SIGOPS Operating Systems Review**

Volume 38 Issue 5

December 2004 **SIGARCH Computer Architecture News** Volume 32 Issue 5**13** [Extending hardware based mandatory access controls for memory leak detection](#) ( Brian L. Sharp, Gregory D. Peterson, Lok Kwong Yan May 2008 **CSIRW '08: Proceedings of the 4th annual workshop on Cyber intelligence research: developing strategies to meet the cyber challenges ahead****Publisher:** ACMFull text available:  Pdf (31.86 KB)Additional Information: [full citation](#), [appendix](#), [index terms](#)**Bibliometrics:** Downloads (6 Weeks): 26, Downloads (12 Months): 246, Download

Current memory architectures do not practice the principle of least privilege. This leads to memory to data corruption and usurpation threats, collectively called memory safety. One famous of such threats is probably the buffer ...

Keywords: data corruption, data usurpation, hardware, mandatory access control, memory safety**14** [A low-cost memory remapping scheme for address bus protection](#) ( Lan Gao, Jun Yang, Marek Chrobak, Youtao Zhang, San Nguyen, Hsien-Hsi Chen September 2006 **PACT '06: Proceedings of the 15th international conference on parallel architectures and compilation techniques**

compilation techniques**Publisher:** ACM  [Request Permissions](#)Full text available:  [Pdf \(536.42 KB\)](#)Additional Information: [full citation](#), [abstract](#)**Bibliometrics:** Downloads (6 Weeks): 4, Downloads (12 Months): 25, Download

The address sequence on the processor-memory bus can reveal abundance of a program. This can lead to critical information leakage such as encryption keys. Addresses can be observed by attaching ...

Keywords: address bus leakage protection, secure processor**15 AEGIS: architecture for tamper-evident and tamper-resistant processors** G. Edward Suh, Dwaine Clarke, Blaise Gassend, Marten van Dijk, Sriniwasan Iyer
June 2003 **ICCS '03: Proceedings of the 17th annual international conference on Computer and communications security****Publisher:** ACM  [Request Permissions](#)Full text available:  [Pdf \(286.90 KB\)](#)Additional Information: [full citation](#), [abstract](#)**Bibliometrics:** Downloads (6 Weeks): 8, Downloads (12 Months): 142, Download

We describe the architecture for a single-chip aegis processor which can detect and respond to attacks against both physical and software attacks. Our architecture assures the security of the processor, such as memory, ...

Keywords: certified execution, secure processors, software licensing**16 Hardware authentication leveraging performance limits in detailed simulation** Daniel Y. Deng, Andrew H. Chan, G. Edward Suh
July 2009 **DAC '09: Proceedings of the 46th Annual Design Automation Conference****Publisher:** ACM  [Request Permissions](#)Full text available:  [Pdf \(197.10 KB\)](#)Additional Information: [full citation](#), [abstract](#)**Bibliometrics:** Downloads (6 Weeks): 18, Downloads (12 Months): 65, Download

This paper proposes a novel approach to check the authenticity of hardware designs by leveraging the performance gap between real hardware and simulations or emulations. We demonstrate that each processor design can ...

Keywords: hardware authentication, secure processors**17 A combined hardware and software architecture for secure computation** Jürg Platte, Edwin Naroska
May 2005 **CF '05: Proceedings of the 2nd conference on Computing frontiers****Publisher:** ACM  [Request Permissions](#)Full text available:  [Pdf \(507.25 KB\)](#)Additional Information: [full citation](#), [abstract](#)**Bibliometrics:** Downloads (6 Weeks): 10, Downloads (12 Months): 60, Download

Remote code execution becomes more and more important as can be seen in computing projects like SETI@home. However, executing programs on a computer can pose significant risks if the program contains sensitive data or ...

Keywords: certified execution, encrypted programs, secure processors

- 18** Hardware-rooted trust for secure key management and transient trus

Jeffrey S. Dwoskin, Ruby B. Lee

October 2007 **CCS '07**: Proceedings of the 14th ACM conference on Compu

Publisher: ACM [Request Permissions](#)

Full text available: [PDF](#) (520.62 KB)

Additional Information: [full citation](#), [abstract](#)

Bibliometrics: Downloads (6 Weeks): 18, Downloads (12 Months): 137, Downl

We propose minimalist new hardware additions to a microprocessor chip for portable computing devices which are used in the field but owned by a consumer. This architecture has trust rooted ...

Keywords: emergency response, hardware policy enforcement, key management, secure processors, transient trust

- 19** Architecture for Protecting Critical Secrets in Microprocessors

Ruby B. Lee, Peter C. S. Kwan, John P. McGregor, Jeffrey Dwoskin, Zhengkai Li

June 2005 **ISCA '05**: Proceedings of the 32nd annual international symposium on Computer architecture

Publisher: ACM

Full text available: [PDF](#) (143.62 KB)

Additional Information: [full citation](#), [abstract](#)

Bibliometrics: Downloads (6 Weeks): 9, Downloads (12 Months): 101, Downlo

We propose "secret-protected (SP)" architecture to enable secure and controlled access to secrets for a given user in an on-line environment. Keys are examples of what needs to be protected and management is a fundamental problem ...

Also published in:

May 2005 **SIGARCH Computer Architecture News** Volume 33 Issue 2

- 20** Architectural Support for High Speed Protection of Memory Integrity in Multiprocessor Systems

Weidong Shi, Hsien-Hsin S. Lee, Mrinmoy Ghosh, Chenghui Lu

September 2004 **PACT '04**: Proceedings of the 13th International Conference on Parallel Architectures and Compilation Techniques

Publisher: IEEE Computer Society

Full text available: [PDF](#) (255.33 KB)

Additional Information: [full citation](#), [abstract](#)

Bibliometrics: Downloads (6 Weeks): 7, Downloads (12 Months): 65, Downlo

Recently there is a growing effort in both the architecture and the software solution for authenticating system memory. As shown in the previous work, authentication will become a vital component for ...

Result page: 1 2 3

Useful downloads:  Adobe Acrobat  QuickTime  Windows Media Player 